

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all previous versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method of forming an in-situ filter for controlling flowback of proppants injected into a fracture of a subterranean formation comprising the step of injecting a spring ~~an expandable member~~ into the fracture.

Claim 2 (Currently Amended): The method of forming an in-situ filter according to claim 1 further comprising the steps of compressing the spring ~~expandable member~~ and inserting it into a mass of a fibrous network.

Claim 3 (Currently Amended): The method of forming an in-situ filter according to claim 2 further comprising the step of placing the compressed spring ~~expandable member~~ and fibrous network into a mold cavity.

Claim 4 (Original): The method of forming an in-situ filter according to claim 3 further comprising the step of injecting an aqueous soluble mixture into the mold cavity.

Claim 5 (Currently Amended): The method of forming an in-situ filter according to claim 4 further comprising the step of curing the aqueous soluble mixture until it forms a solid structure, which encapsulates the compressed spring ~~expandable member~~ and fibrous network.

Claim 6 (Currently Amended): The method of forming an in-situ filter according to claim 5 further comprising the step of removing the solid structure containing the compressed spring ~~expandable member~~ and fibrous network from the mold cavity.

Claim 7 (Currently Amended): The method of forming an in-situ filter according to claim 6 further comprising the step of mixing the solid structure containing the compressed spring ~~expandable member~~ and fibrous network with a proppant slurry.

Claim 8 (Currently Amended): The method of forming an in-situ filter according to claim 7 further comprising the step of injecting the mixture of the solid structure containing the

compressed spring ~~expandable member~~ and fibrous network and the proppant slurry into the fracture.

Claim 9 (Currently Amended): The method of forming an in-situ filter according to claim 8 further comprising the step of dissolving the soluble mixture forming the solid structure after the spring ~~expandable member~~ has been injected into the fracture thereby releasing the spring ~~expandable member~~ from the compressed state, which together with the fibrous network form the in-situ filter.

Claim 10 (Currently Amended): An in-situ filter for controlling flowback of proppants formed in a fracture of a subterranean formation comprising a network of fibrous material and a plurality of interspersed springs ~~expandable members~~.

Claim 11 (Original): The in-situ filter according to claim 10 wherein the fibrous network comprises materials selected from the group consisting of stainless steel wool, a composite fibrous sponge and combinations thereof.

Claim 12 (Currently Amended): The in-situ filter according to claim 10 wherein the springs ~~are expandable members comprise springs~~ selected from the group consisting of a torsion spring, a compression spring, an open coil spring, a helical spring and a clock spring.

Claim 13 (Original): The in-situ filter according to claim 12 wherein the springs are clock springs and a plurality of elongated members are attached at one end to each clock spring.

Claim 14 (Original): The in-situ filter according to claim 13 wherein an other end of the plurality of elongated members are anchored by, and attached to, a ball.

Claim 15 (Original): The in-situ filter according to claim 14 further comprising a flexible filter sheath attached to each spring and associated elongated members.

Claim 16 (Currently Amended): The in-situ filter according to claim 13 wherein the springs ~~expandable members are formed of a material selected from the group consisting of~~ comprise at least one of the following: a stainless steel wire ~~and~~ or a composite polymer.

Claim 17 (Original): The in-situ filter according to claim 15 wherein the flexible filter sheath is formed of a stainless woven wire cloth having a mesh size greater than 60-mesh.

Claim 18 (Currently Amended): A system for controlling flowback of proppants injected into a fracture of a subterranean formation comprising a plurality of encapsulated compressed springs ~~expandable members~~ placed in the fracture adjacent to a wellbore formed within the subterranean formation.

Claim 19 (Currently Amended): The system for controlling flowback of proppants according to claim 18 wherein a mass of fibrous material is encapsulated with the compressed springs ~~expandable members~~.

Claim 20 (Currently Amended): The system for controlling flowback of proppants according to claim 19 wherein an aqueous soluble mixture comprising a filler material is encapsulated with the compressed springs ~~expandable members~~.

Claim 21 (Original): The system for controlling flowback of proppants according to claim 20 wherein the filler material comprises glycerin, wintergreen oil, oxyzolidine oil and water.

Claim 22 (Original): The system for controlling flowback of proppants according to claim 20 wherein the aqueous soluble mixture further comprises an adhesive.

Claim 23 (Original): The system for controlling flowback of proppants according to claim 22 wherein the adhesive comprises collagen.

Claim 24 (Currently Amended): The system for controlling flowback of proppants according to claim 20 wherein the aqueous soluble mixture dissolves under downhole conditions causing the compressed springs ~~expandable members~~ to be released from the encapsulated state and expand to form an in-situ filter in the fracture adjacent to the wellbore.

Claim 25 (Original): The system for controlling flowback of proppants according to claim 24 wherein the aqueous soluble mixture dissolves in approximately 3 to 8 hours.

Claim 26 (Original): The system for controlling flowback of proppants according to claim 24 wherein the aqueous soluble mixture dissolves in temperatures greater than approximately 55 °C.

Claim 27 (Currently Amended): The system for controlling flowback of proppants according to claim 18 wherein each of the compressed springs ~~expandable members~~ comprises at least one spring selected from the group consisting of a torsion spring, a compression spring, an open coil spring, a helical spring and a clock spring.

Claim 28 (Original): The system for controlling flowback of proppants according to claim 27 wherein the springs are clock springs and a plurality of elongated members are attached at one end to each clock spring.

Claim 29 (Original): The system for controlling flowback of proppants according to claim 28 wherein the other end of the plurality of elongated members are anchored by, and attached to, a ball.

Claim 30 (Original): The system for controlling flowback of proppants according to claim 29 further comprising a flexible filter sheath attached to each spring and associated elongated members.

Claim 31 (Original): The system for controlling flowback of proppants according to claim 28 wherein the elongated members are formed of a material selected from the group of a stainless steel wire and a composite polymer.

Claim 32 (Original): The system for controlling flowback of proppants according to claim 30 wherein the flexible filter sheath is formed of a stainless woven wire cloth having a mesh size greater than 60-mesh.